

CLAIMS

What is claimed is:

1. An integrated circuit comprising:

5 at least one metal layer comprising a plurality of sections, each section comprising a plurality of conductors to interconnect points on the integrated circuit, wherein a preferred direction, within a section, defines a direction, relative to the boundaries of the integrated circuit, for at least fifty percent of conductors in the section;

a first section comprising a first preferred direction for the conductors deposited in the first section; and

a second section comprising a preferred diagonal wiring direction for the conductors deposited in the second section, such that the diagonal wiring preferred direction is a direction different from the first preferred direction.

20 2. The integrated circuit as set forth in claim 1, wherein the first preferred direction comprises a diagonal direction.

2. The integrated circuit as set forth in claim 2, wherein the first preferred diagonal direction comprises a direction perpendicular to said a preferred diagonal wiring direction in said second section.

4. The integrated circuit as set forth in claim 1, wherein the diagonal direction comprises an octalinear direction.

5 5. The integrated circuit as set forth in claim 1, wherein the diagonal direction comprises a hexalinear direction.

6. The integrated circuit as set forth in claim 1, wherein:

the first preferred direction comprises a first diagonal direction; and

10 the second preferred direction comprises a second diagonal direction, different from the first diagonal direction.

6. The integrated circuit as set forth in claim 5, wherein:

the first diagonal direction comprises an octalinear direction; and

15 the second diagonal direction comprises an octalinear direction complementary to the first diagonal direction.

7. The integrated circuit as set forth in claim 5, wherein:

the first diagonal direction comprises a hexalinear direction; and

20 the second diagonal direction comprises a hexalinear direction complementary to the first diagonal direction.

8. The integrated circuit as set forth in claim 5, wherein:

the first diagonal direction comprises an octalinear direction; and  
the second diagonal direction comprises a hexalinear direction.

9. The integrated circuit as set forth in claim 1, wherein the first preferred direction  
comprises a first Manhattan direction.

10. The integrated circuit as set forth in claim 1, further comprising at least one more  
additional section having a preferred direction comprising a diagonal direction.

11. The integrated circuit as set forth in claim 1, further comprising at least one more  
section having a preferred direction comprising a Manhattan direction.

12. The integrated circuit as set forth in claim 1, further comprising at least one  
additional wire deposited in a section with a direction different than the preferred direction of the  
section.

13. The integrated circuit as set forth in claim 12, wherein:  
the preferred direction comprises a diagonal direction; and  
the direction different than the preferred direction comprises a Manhattan direction.

20

14. The integrated circuit as set forth in claim 12, wherein:  
the preferred direction comprises a Manhattan direction; and

the direction different than the preferred direction comprises a diagonal direction.

15. The integrated circuit as set forth in claim 12, wherein the direction different than the preferred direction comprises a direction complementary to the preferred direction.

5